

MONTHLY WEATHER REVIEW.

(GENERAL WEATHER SERVICE OF THE UNITED STATES.)

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OFFICE OF THE CHIEF SIGNAL OFFICER,
DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

The meteorological data collected in this office during the month of June and until the 20th of July, 1882, has been carefully examined and a general summary of the several elements for each district in the United States, is presented in this REVIEW.

The temperature during the month of June averaged from 0.1 to 0.2 of a degree above the normal in the districts on the Atlantic coast; it rose slightly in all other districts east of the Rocky mountains, and this increase over the low mean temperature of the previous month, has been favorable to agricultural interests, especially in the eastern and southern sections of the country, where the crops have been greatly improved. The wheat crop has been secured in the southern districts and harvesting was in progress as far north as the fortieth parallel, at the close of the month. Heavy rains in the states north of the Ohio valley and in sections of the northwest, injured the growing corn, and the late spring reduced the acreage of this crop, but the recent warm weather in these sections has greatly improved its condition.

On the Pacific coast, the rainfall has been slightly below the mean for the month, except in southern California, and the wheat crop of Oregon and Washington territory promises to be above the average, while that of California will probably fall slightly below the average.

The cotton region reports have been continued, and for the purposes of comparison, the conditions of rainfall and temperature are given for the months, April, May and June. The warm weather of June in the cotton growing regions has improved the condition of the crop, in the Gulf and south Atlantic states. Reports from the lower Mississippi valley, indicate that a good, but late crop will be produced in the overflowed districts.

The month has been particularly marked by the occurrence of severe local storms and tornadoes, which in many cases, caused great loss of life and property. These destructive storms occurred in almost every section of the country, but were most numerous in the states of the upper Mississippi and lower Missouri valleys. The tornado which occurred in eastern Iowa on the night of the 17th, was the most destructive storm of the month.

Ocean ice continued in the north Atlantic during the month, but it will be seen from the chart that the area within which

vessels have reported ice or icebergs, is not so large as in the previous month, although icebergs were observed in longitudes farther to the east, than in either May or April. Several vessels were wrecked in the ice-fields of the north Atlantic during the month, and the chart may be of service in selecting the safe routes for vessels leaving the Atlantic ports. The vessel reports, which give the latitude and longitude in which ice was observed will be found under the heading of OCEAN ICE. Under the same heading is given, an interesting extract of an article written by Mr. E. Douglas Archibald, in which the writer discusses the subject of ocean ice and gives its years of maximum frequency, compared with the years of maximum sun-spots.

That part of the REVIEW referring to International Meteorology, presents the general weather conditions which prevailed over the northern hemisphere during the month of April, 1880, and the tracks of barometric minima for July, 1880, traced from simultaneous observations taken at 7.35 a. m., Washington mean time. The month of April was chiefly remarkable for the high temperatures which prevailed in central Europe, and as an interesting feature of chart v., may be mentioned, the tracing of the first typhoon of July 1880, occurring in the China sea.

In the preparation of this REVIEW the following data have been used, viz.: the regular tri-daily weather charts, containing the data of simultaneous observations taken at one hundred and thirty-six Signal Service stations and fourteen Canadian stations, as telegraphed to this office; one hundred and eighty monthly journals and one hundred and seventy-one monthly means from the former, and fourteen monthly means from the latter; one hundred and eighty monthly registers from voluntary observers; forty-eight monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; Marine Reports through the co-operation of the New York Herald Weather Service; abstracts of Ships' Logs, furnished by the publishers of "The New York Maritime Register"; monthly reports from the local weather services of Kansas, Nebraska, and Missouri, and of the Central Pacific railway company; trustworthy newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The distribution of mean atmospheric pressure for the month of June, 1882, is shown by isobarometric lines, in black, on chart number ii.